

community, but were persistent in a low frequency (Oosting 1942:51). Also present in small numbers were tulip poplar, red gum, juniper, sassafras, persimmon, black cherry, sourwood, ash, elm, holly, ironwood and dogwood, all part of the understory in a mature upland forest (Oosting 1942:95).

Today the Yadkin County floodplains are intensely cultivated and the backswamps are drained by ditching. Prior to the Euro-American intrusion the floodplains maintained an alluvial forest dominated by more water-tolerant species than those found in the adjacent uplands. Because undisturbed climax communities in river bottoms are rare, the content of the prehistoric alluvial forest at Donnaha must remain uncertain. Using data from elsewhere in the Piedmont, however, some projections can be made. Forty km to the south the alluvial forest is recorded as dominated by river birch and box elder with a diverse subcanopy of sycamore, green ash, hickory and elm (Duke Power 1974:2.7-2). In the eastern Piedmont, investigations along the Haw River of Chatham County defined an alluvial forest of river birch, sweetgum, ash, sycamore, box elder, hackberry, red maple, sugar maple, hickory and loblolly pine, and a "swamp forest" (presumably in the backswamps) of five oak species, hickory and elm (Claggett and Cable 1982:85). Probably the most accurate assessment of floodplain vegetation was compiled by Oosting (1942), who found a 20 hectare stand of undisturbed forest in the floodplain of the Eno River, north of Durham and about 130 km east of Donnaha. This "postclimax" forest is dominated by willow oak; red gum; swamp, red, and white oak; and minor numbers of hickory and pine. Hard maple was abundant in the understory, so evident as to lead Oosting to describe the postclimax alluvial forest as oak-hickory-hard maple. In this setting 32 herbs are listed, almost all of moderate or low frequency, i.e. a diverse community. Fifteen of the genera listed have recorded use by North American Indians (Yanousky 1936). Oosting notes that only slight variations in the perfection of drainage result in very different moisture conditions in floodplains, and these differences may be reflected in the vegetation type to a marked degree. Thus the variability of the soils and elevations in the Donnaha floodplain mentioned earlier must have created a quite diverse floral community within the site catchment.

No attempt has been made to systematically study the botanical remains from Donnaha, although this is a recognized requirement for an understanding of the subsistence pattern. At present we have recognized remains only of hickory and black walnuts and persimmon seeds; the only domesticated identified is maize -- a complete charred cob was recovered by the 1982 work.

The present levee which contains the site proper is, as mentioned, the most elevated land in the bottom and is built of Buncombe loamy sand, low in natural fertility. This, too, probably was in trees prior to the site occupation but seemingly was cleared by the occupants. The levee was being built and eroded during the occupation, and an alluvial thicket likely was the response to continuing disturbance by the river and the Donnaha inhabitants--the site stratigraphy showed few instances of stains left by decayed tree root systems.